

# **Qualification Specification**

Level 4 Diploma in the Remote Piloting of Unmanned Aircraft Systems for Commercial Operations

# Contents

|   | Page |
|---|------|
| Introduction                              | 3    |
| Qualification profile                     | 3    |
| Centre requirements                       | 4    |
| Support for candidates                    | 4    |
| Assessment                                | 5    |
| Internal quality assurance                | 5    |
| Adjustments to assessment                 | 5    |
| Results enquiries and appeals             | 6    |
| Certification                             | 6    |
| Learning Outcomes and Assessment Criteria | 7    |

# Introduction

This qualification is appropriate for individuals engaged in the remote piloting of unmanned aircraft systems for a commercial operator. Topics include: knowledge of regulations, safety issues, preflight processes and procedures, flight manoeuvres, post flight procedures and emergency procedures; candidates will also develop an Operations Manual for the commercial use of unmanned aircraft systems.

The awarding organisation for this qualification is ProQual Awarding Body and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual). The specification for these qualifications has been approved by the Welsh Government for use by centres in Wales.

# **Entry Requirements**

There are no formal entry requirements for this qualification. Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

# **Qualification Profile**

| Qualification title         | ProQual Level 4 Diploma in the Remote Piloting of<br>Unmanned Aircraft Systems for Commercial Operation             |
|-----------------------------|---|
| Ofqual qualification number | 603/1139/3  |
| Level                       | 4   |
| Total Qualification Time    | 190 hours (160 GLH)   |
| Assessment                  | Pass or fail<br>Internally assessed and verified by centre staff<br>External quality assurance by ProQual verifiers |
| Qualification start date    | 1/3/2017  |
| Qualification end date      | 31/7/2026   |

# **Qualification Structure**

Candidates must complete the 3 Mandatory units.

| F/615/5256 | Knowledge of Unmanned Aircraft Systems Operations                   |
|------------|---|
| J/615/5257 | Flight Skills for Unmanned Aircraft Systems                         |
| L/615/5258 | Developing an Operations Manual for the Remote Piloting of Unmanned |
|            | Aircraft Systems  |

# **Centre Requirements**

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

### Staff

Staff delivering this qualification must be appropriately qualified and occupationally competent.

#### Assessors/Internal Quality Assurance

For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or verifier qualifications, such as:

- ProQual Level 3 Certificate in Teaching, Training and Assessing
- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

# **Support for Candidates**

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

# Assessment

Candidates must demonstrate the level of knowledge and competence described each of the units. Assessment is the process of measuring a candidate's knowledge and understanding against the standards set in the qualification.

Each candidate is required to produce evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- assignments/projects/reports
- worksheets
- portfolio of evidence
- video evidence
- record of oral and/or written questioning
- candidate test papers

**Learning outcomes** set out what a candidate is expected to know, understand or be able to do.

**Assessment criteria** specify the standard a candidate must meet to show the learning outcome has been achieved.

*Learning outcomes and assessment criteria for this qualification can be found from page 7 onwards.* 

## **Internal Quality Assurance**

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

## **Adjustments to Assessment**

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

# **Results Enquiries and Appeals**

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

# Certification

Candidates who demonstrate achievement of the qualification will be awarded a certificate giving the full qualification title -

### ProQual Level 4 Diploma in the Remote Piloting of Unmanned Aircraft Systems for Commercial Operations

#### **Claiming certificates**

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the required number of units for a qualification. All certificates will be issued to the centre for successful candidates.

#### **Replacement certificates**

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

## Learning Outcomes and Assessment Criteria

## Unit F/615/5256

### Knowledge of Unmanned Aircraft Systems Operations

| Learning Outcome - The learner will:  |     | Assessment Criterion - The learner can:   |
|---|-----|---|
| 1 Understand legislation and regulations<br>relating to the operation of Unmanned<br>Aircraft Systems | 1.1 | Demonstrate knowledge of the current legislation<br>and regulations relating to the operation of<br>unmanned aircraft systems for commercial<br>operation |
| 2 Understand how to remotely pilot an<br>Unmanned Aircraft System                                     | 2.1 | <ul> <li>Explain remote piloting operations including what is meant by:</li> <li>Visual Line of Sight</li> <li>Extended Visual Line of Sight</li> </ul>   |
|   | 2.2 | Explain safety issues associated with the remote piloting of Unmanned Aircraft Systems  |
|   | 2.3 | Explain the purpose of a risk assessment  |
|   | 2.4 | Create a risk assessment plan for an unmanned piloting operation  |
| 3 Understand what is meant by Beyond<br>Visual Line of Sight  | 3.1 | Explain what is meant by Beyond Visual Line of Sight  |

## Assessment

There must be valid, authentic and sufficient for all the assessment criteria. However, one piece of evidence may be used to meet the requirements of more than one learning outcome or assessment criterion.

### Unit J/615/5257 Flight Skills for Unmanned Aircraft Systems

| Learning Outcome - The learner will:  |     | Assessment Criterion - The learner can:   |
|---|-----|---|
| 1 Understand pre-flight procedures for<br>remotely piloting an Unmanned Aircraft<br>System  |     | <ul> <li>List pre-flight processes and procedures, including</li> <li>Flight planning</li> <li>Site assessment</li> <li>Emergencies</li> </ul>  |
| 2 Be able to pilot an Unmanned Aircraft<br>System   | 2.1 | <ul> <li>Demonstrate flight manoeuvres:</li> <li>20 second hover</li> <li>Small circle – around point 1 at a height of approximately 20 metres</li> <li>Height perception of approximately 20 metres</li> <li>Linear tracking – maintaining a constant height and speed</li> <li>Descending return to home</li> <li>Loss of control link</li> </ul> |
|   | 2.2 | Describe the procedures to follow when breaches of safety occur   |
| 3 Understand post flight procedures for<br>remotely piloting an Unmanned Aircraft<br>System |     | List post flight procedures including the completion<br>of:<br>• Site assessment form<br>• Systems technical log<br>• Pilot logbook   |
| 4 Understand emergency procedures   | 4.1 | Explain incident/accident procedures  |
| when piloting an Unmanned Aircraft<br>System  |     | Explain emergency procedures  |
| 5 Understand technical aspects of<br>Unmanned Aircraft Systems                              | 5.1 | Demonstrate an understanding of the technical aspects of an Unmanned Aircraft and its systems   |

### Assessment

There must be valid, authentic and sufficient for all the assessment criteria. However, one piece of evidence may be used to meet the requirements of more than one learning outcome or assessment criterion.

### Unit L/615/5258 Developing an Operations Manual for the Remote Piloting of Unmanned Aircraft Systems

| Learning Outcome - The learner will:  |     | Assessment Criterion - The learner can:   |
|---|-----|---|
| 1 Understand the organisational and<br>individual responsibilities for the<br>remote piloting of Unmanned Aircraft<br>Systems | 1.1 | Identify the:<br>(a) structure of the organisation<br>(b) management lines<br>(c) nominated personnel and their duties  |
| the remote piloting of Unmanned   | 2.1 | Describe the system in place for supervising<br>Unmanned Aircraft System operations   |
| Aircraft Systems  |     | <ul> <li>Describe reporting requirements for:</li> <li>Accident prevention</li> <li>Flight team requirements</li> <li>Crew health</li> <li>Limitations</li> </ul>   |
| 3 Understand the operational procedures<br>for the remote piloting of Unmanned<br>Aircraft Systems                            | 3.1 | <ul> <li>Explain the operational procedures used by the organisation, incorporating:</li> <li>Flight planning and preparation</li> <li>On-site procedures and pre-flight checks</li> <li>Flight procedures</li> <li>Logs and checklists</li> <li>Risk assessment</li> <li>Emergency procedures</li> </ul> |
|   | 3.2 | Demonstrate knowledge of how:<br>(a) to complete a risk assessment matrix<br>(b) the matrix is assessed   |

### Assessment

There must be valid, authentic and sufficient for all the assessment criteria. However, one piece of evidence may be used to meet the requirements of more than one learning outcome or assessment criterion.



ProQual Awarding Body ProQual House Annie Med Lane South Cave HU15 2HG UK

Tel: +44(0)1430 423822

www.progualab.com

enquiries@proqualab.com